



Program Revision Proposal: Changes to an Existing Program

Form 3A

Version 2016-10-13

SUNY approval and SED registration are required for many changes to registered programs. To request a change to a registered program leading to an undergraduate degree, a graduate degree, or a certificate that does not involve the creation of a new program,¹ a Chief Executive or Chief Academic Officer must submit a **signed cover letter and this completed form** to the SUNY Provost at program.review@suny.edu.

Section 1. General Information																	
a) Institutional Information	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 2px 5px;">Institution's 6-digit SED Code:</td> <td style="padding: 2px 5px;">210500</td> </tr> <tr> <td style="padding: 2px 5px;">Institution's Name:</td> <td style="padding: 2px 5px;">University at Albany</td> </tr> <tr> <td style="padding: 2px 5px;">Address:</td> <td style="padding: 2px 5px;"><i>1400 Washington Avenue, Albany, NY 12222</i></td> </tr> </table>	Institution's 6-digit SED Code :	210500	Institution's Name:	University at Albany	Address:	<i>1400 Washington Avenue, Albany, NY 12222</i>										
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Institution's Name:	University at Albany																
Address:	<i>1400 Washington Avenue, Albany, NY 12222</i>																
b) Program Locations	<p>List each campus where the entire program will be offered (with each institutional or branch campus 6-digit SED Code): 210500</p> <p>List the name and address of off-campus locations (i.e., extension sites or extension centers) where courses will offered, or check here [X] if not applicable:</p>																
c) Registered Program to be Changed	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 2px 5px;">Program Title:</td> <td style="padding: 2px 5px;">Physics</td> </tr> <tr> <td style="padding: 2px 5px;">SED Program Code</td> <td style="padding: 2px 5px;">03017</td> </tr> <tr> <td style="padding: 2px 5px;">Award(s) (e.g., A.A., B.S.):</td> <td style="padding: 2px 5px;">B.S.</td> </tr> <tr> <td style="padding: 2px 5px;">Number of Required Credits:</td> <td style="padding: 2px 5px;">Minimum [120] If tracks or options, largest minimum []</td> </tr> <tr> <td style="padding: 2px 5px;">HEGIS Code:</td> <td style="padding: 2px 5px;">1902</td> </tr> <tr> <td style="padding: 2px 5px;">CIP 2010 Code:</td> <td style="padding: 2px 5px;">40.0801</td> </tr> <tr> <td style="padding: 2px 5px;">Effective Date of Change:</td> <td style="padding: 2px 5px;">Fall 2021</td> </tr> <tr> <td style="padding: 2px 5px;">Effective Date of Completion²</td> <td style="padding: 2px 5px;">Spring 2025</td> </tr> </table> <p style="padding: 2px 5px;"><i>Joint Programs to Update with this Registration Update:</i> 89210, 28846, 82307</p>	Program Title:	Physics	SED Program Code	03017	Award(s) (e.g., A.A., B.S.):	B.S.	Number of Required Credits:	Minimum [120] If tracks or options, largest minimum []	HEGIS Code :	1902	CIP 2010 Code :	40.0801	Effective Date of Change:	Fall 2021	Effective Date of Completion ²	Spring 2025
Program Title:	Physics																
SED Program Code	03017																
Award(s) (e.g., A.A., B.S.):	B.S.																
Number of Required Credits:	Minimum [120] If tracks or options, largest minimum []																
HEGIS Code :	1902																
CIP 2010 Code :	40.0801																
Effective Date of Change:	Fall 2021																
Effective Date of Completion ²	Spring 2025																
d) Campus Contact	<p>Name and title: Kaitlyn Beachner, Staff Associate for Undergraduate Academic Programs Telephone and email: 518 – 442 – 3941; kbeachner@albany.edu</p>																
e) Chief Executive or Chief Academic Officer Approval	<p>Signature affirms that the proposal has met all applicable campus administrative and shared governance procedures for consultation, and the institution's commitment to support the proposed program. <i>E-signatures are acceptable.</i></p> <p>Name and title: Carol Kim, Ph.D., Senior Vice President for Academic Affairs & Provost Signature and date: 8/19/2021</p> <div style="background-color: #d9e1f2; padding: 2px 5px;">If the program will be registered jointly³ with one or more other institutions, provide the following information for <u>each</u> institution:</div> <p>Partner institution's name and 6-digit SED Code: Albany Law School, 402000</p> <p>Name, title, and signature of partner institution's CEO (or append a signed letter indicating approval of this proposal): See Letter in the Appendix</p>																

¹ To propose changes that would create a new program, Form 3B, [Creating a New Program from Existing Program\(s\)](#), is required.
² If the current program(s) must remain registered until enrolled students have graduated, the anticipated effective date by which continuing students will have completed the current version of the program(s).
³ If the partner institution is non-degree-granting, see SED's [CEO Memo 94-04](#).

Section 2. Program Information

Section 2.1. Changes in Program Content

No changes in program content. *Proceed to Section 2.2.*

a) Check all that apply. Describe each proposed change and why it is proposed.

- Cumulative change from SED's last approval of the registered program of one-third or more of the minimum credits required for the award (e.g., 20 credits for associate degree programs, 40 credits for bachelor's degree programs)
- Changes in a program's focus or design
- Adding or eliminating one or more options, concentrations or tracks
- Eliminating a requirement for program completion (such as an internship, clinical placement, cooperative education, or other work or field-based experience). Adding such requirements must remain in compliance with SUNY credit cap limits.
- Altering the liberal arts and science content in a way that changes the degree classification of an undergraduate program, as defined in [Section 3.47\(c\)\(1-4\) of Regents Rules](#)

Description: Faculty collectively decided to remove emphasis options and replace it with just one track with many options within the requirements for students to choose from due to changes in faculty and the desire to have a more broad program instead of tracks within the program. Changes were designed to offer more options within a structure to ensure students are still learning basics and building upon them, while having the freedom to choose courses that match their interests. There is now options for advanced courses to count towards the degree requirements and an optional honors track for exceptional students.

b) **Provide** a side-by-side comparison of all the courses in the existing and proposed revised program that clearly indicates all new or significantly revised courses, and other changes.

1990 Physics B.A. Requirements:	2021 Proposed Changes to Physics B.A. Requirements:					
64-65 credits:	69-76 credits:					
<p><i>There is no "general program B.S." in the 1991-1992 bulletin. Students selected one concentration (i.e., one "combined major and minor sequence") from the list of three below.</i></p> <p><i>The three concentrations are marked with different color asterisks (* * *) that are used to denote which courses belong to which concentration throughout the document.</i></p>	<p>General program B.S.</p>					
<p>#1 – <i>Science emphasis (65 cr.) *</i></p> <p>#2 – <i>Computer science emphasis B.S. (64 cr.) *</i></p> <p>#3 – <i>Teacher education program B.S. (65 cr.) *</i></p>						
PHY 120N – Introductory Physics I (4) ***						
	Introductory physics sequence	Select one	APHY 140 – Physics I: Mechanics (3) TPHY 141 – Honors Physics I: Mechanics (3) APHY 142 – Physics I: Advanced Mechanics (3)			
PHY 124N – Introductory Physics II (4) ***		Select one	APHY 150 – Physics II: Electromagnetism (3) TPHY 151 – Honors Physics II: Electromagnetism (3)			
		Select one	APHY 152 – Physics II: Advanced Electromagnetism (3)			
	APHY 240 – Physics III: Structure of Matter (3)					
PHY 220 – Introductory Physics III (4) ***						
PHY 221 – Introductory Physics Lab I (1) ***	Lab sequence for introductory courses	Select one	APHY 106 – General Physics Lab I (1) APHY 145 – Physics Lab I (1)			
		Select one	APHY 109 – General Physics Lab II (1) APHY 155 – Physics Lab II (1)			
PHY 225 – Introductory Physics Lab II (1) ***		APHY 245 – Physics Lab III (1)				
PHY 224 – Introductory Physics IV (3) ***	Higher level physics courses	Select one	APHY 235 – Mathematics in Physics (3) AMAT 314 – Analysis for Applications I (3) and AMAT 315 – Analysis for Applications II (3)			
		APHY 250 – Physics IV: Waves (3)				
		APHY 320 – Classical Mechanics (3)				
		APHY 335Z – Advanced Physics Lab (3)				
		APHY 340 – Electromagnetism I: Statics (3)				
		APHY 350 – Electromagnetism II: Electrodynamics (3)				
		APHY 440 – Quantum Physics I (3)				
		APHY 450 – Quantum Physics II (3)				
		APHY 460 – Thermodynamics and Statistical Physics (3)				
CHM 120N – General Chemistry I (3) **	Chemistry sequence	Select one	ACHM 120 – General Chemistry I (3) ACHM 130 – Advanced Chemistry I (3)			
CHM 121N – General Chemistry I (3) **		Select one	ACHM 121 – General Chemistry II (3) ACHM 131 – Advanced Chemistry II (3)			
		ACHM 124 – General Chemistry Laboratory I (1)				
CHM 122A and B – General Chemistry Laboratory (1,1) **		ACHM 125 – General Chemistry Laboratory II (1)				
MAT 112Y – Calculus I (4) ***	Calculus sequence	Select one sequence	A AMAT 112 – Calculus I (4) AMAT 113 – Calculus II (4)			
MAT 113Y – Calculus II (4) ***			B TMAT 118 – Honors Calculus I (4) TMAT 119 – Honors Calculus II (4)			
			AMAT 214 – Calculus of Several Variables (4)			
MAT 214: Calculus of Several Variables ***			AMAT 220 – Linear Algebra (3)			
	Mathematics elective (select one)	AMAT 314 – Analysis for Applications I (3)				
		AMAT 367 – Discrete Probability (3)				
		AMAT 412 – Complex Variables for Applications (3)				

		APHY 409Y – Mathematical Models in Physics (3)
PHY 315 – Electronics (3) **		APHY 415Y – Electronics (3)
		APHY 426Y – Introduction to Particle Physics (3)
		APHY 430Y – Optics (3)
		APHY 443Y – Introduction to Cosmology (3)
		APHY 448Y – Medical Imaging (3)
		APHY 449Y – Introduction to Quantum Foundations and Quantum Information (3)
		APHY 451Y – Bayesian Data Analysis and Signal Processing (3)
		APHY 459Y – Symmetry in Physics (3)
		APHY 462Y – Physics of Materials (3)
		APHY 466Y – X-ray Optics, Analysis, and Imaging (3)
		APHY 477Y – Computational Methods (3)
		ICEN/ICSI 201 – Introduction to Computer Science
#1 – Science emphasis B.S. *		<i>Removed concentration</i>
PHY 229 – Mathematics in Physics (4) **		
PHY 332 – Intermediate Electricity and Magnetism (4)		
PHY 344 – Introductory Quantum Mechanics (3)		
PHY 403/403Z – Intermediate Physics Laboratory I (1)		
PHY 421 – Modern Physics (3)		
PHY 431 – Thermodynamics and Statistical Physics (3)		
“3 credits as advised from the fields of science or mathematics”		
#2 – Computer science emphasis B.S. *		<i>Removed concentration</i>
PHY 229 – Mathematics in Physics (4) **		
PHY 321 – Intermediate Mechanics (4) **		
PHY 353Y – Microprocessor Applications (3)		
PHY 419 – Descriptive Modern Physics (3)		
PHY 431 – Thermodynamics and Statistical Physics (3)		
PHY 454 – Microprocessor Applications Laboratory (3)		
CSI 201Y – Introduction to Computer Science (4)		
CSI 202 – Assembly Language Programming (4)		
CSI 310 – Data Structures (3)		
CSI 401 – Numerical Methods for Digital Computers (3)		
#3 – Teacher education program B.S. *		<i>Removed concentration</i>
PHY 321 – Intermediate Mechanics (4) **		
Select one	PHY 315 – Electronics (3)	
	PHY 403/403Z – Intermediate Physics Laboratory I (3)	
“8 credits of electives in physics at the 300 level or higher”	PHY 305 – Physics Principles in Nuclear Medicine (3)	
	PHY 316 – Electronics: Projects (3)	
	PHY 332 – Intermediate Electricity and Magnetism (4)	
	PHY 244 – Introductory Quantum Mechanics (3)	
	PHY 353Y – Microprocessor Applications (3)	
	PHY 360 – Modern Optics (3)	
	PHY 408 – Polymer Chemistry and Physics (3)	

	PHY 419/419Z – Descriptive Modern Physics (3)	
	PHY 421 – Modern Physics (3)	
	PHY 431 – Thermodynamics and Statistical Physics (3)	
	PHY 462 – Physics of Materials (3)	
	PHY 464 – Materials Characterization (3)	
	PHY 465 – Materials Fabrication (3)	
	BIO 110N – General Biology I (4)	
	BIO 111N – General Biology II (4)	
6 credits selected from:	ATM 320 – Atmospheric Thermodynamics (3)	
	ATM 321 – Physical Meteorology (4)	
	ATM 407 – Atmospheric Chemistry (4)	
Select one	GEO 100N – Planet Earth (3)	
	GEO 200 – Internal Processes and Physics of the Earth (3)	
		Optional Honors Track for Exceptional Students: <i>Students may apply for admission to the honors program by submitting a letter of request to the department chair no later than April 15 of the sophomore year (for admission in the fall) or November 15 of the junior year (for admission in the spring). Junior transfers may apply at the time of their admission to the University. Primary emphasis will be placed on indications of academic ability and maturity sufficient for applicants to pursue with distinction a program involving independent research.</i>
		APHY 497 – Independent Research (1-3)
		APHY 498 – Honors Seminar in Physics (3)

c) For each new or significantly revised course, **provide** a syllabus at the end of this form, and, on the **SUNY Faculty Table** provide the name, qualifications, and relevant experience of the faculty teaching each new or significantly revised course. NOTE: *Syllabi for all courses should be available upon request. Each syllabus should show that all work for credit is college level and of the appropriate rigor. Syllabi generally include a course description, prerequisites and corequisites, the number of lecture and/or other contact hours per week, credits allocated (consistent with [SUNY policy on credit/contact hours](#)), general course requirements, and expected student learning outcomes.*

ACHM 130 – Advanced Chemistry I (3)
 ACHM 131 – Advanced Chemistry II (3)
 TMAT 118 – Honors Calculus I (4)
 TMAT 119 – Honors Calculus II (4)
 AMAT 220 – Linear Algebra (3)
 AMAT 314 – Analysis for Applications I (3)
 AMAT 315 – Analysis for Applications II (3)
 AMAT 367 – Discrete Probability (3)
 AMAT 412 – Complex Variables for Applications (3)
 TPHY 141 – Honors Physics I: Mechanics (3)
 APHY 142 – Physics II: Advanced Mechanics (3)
 APHY 145 – Physics Lab I (1)
 APHY 152 – Physics II: Advanced Electromagnetism

TPHY 151 – Honors Physics II: Electromagnetism (3)
 APHY 155 – Physics Lab II (1)
 APHY 235 – Mathematics in Physics (3)
 APHY 245 – Physics Lab III (1)
 APHY 320 – Classical Mechanics (3)
 APHY 340 – Electromagnetism I: Statics (3)
 APHY 350 – Electromagnetism II: Electrodynamics (3)
 APHY 409Y – Mathematical Models in Physics (3)
 APHY 426Y – Introduction to Particle Physics (3)
 APHY 430Y – Optics (3)
 APHY 440 – Quantum Physics I (3)
 APHY 443Y – Introduction to Cosmology (3)
 APHY 448Y – Medical Imaging (3)

APHY 449Y – Introduction to Quantum Foundations and Quantum Information (3)

APHY 450 – Quantum Physics II (3)

APHY 451Y – Bayesian Data Analysis and Signal Processing (3)

APHY 459Y – Symmetry in Physics (3)

APHY 460 – Thermodynamics and Statistical Physics (3)

APHY 462Y – Physics of Materials (3)

APHY 466Y – X-ray Optics, Analysis, and Imaging (3)

APHY 477Y – Computational Methods (3)

ICEN/ICSI 201 – Introduction to Computer Science

d) What are the additional costs of the change, if any? If there are no anticipated costs, explain why.

There are no additional costs since all courses are taught by regular faculty in the Physics and other departments.

Section 2.2. Other Changes

Check all that apply. Describe each proposed change and why it is proposed.

Program title

Program award

[Mode of delivery](#)

NOTES: (1) If the change in delivery enables students to complete 50% or more of the program via distance education, submit a [Distance Education Format Proposal](#) as part of this proposal. (2) If the change involves adding an accelerated version of the program that impacts financial aid eligibility or licensure qualification, SED may register the version as a separate program.

[Format change\(s\)](#) (e.g., from full-time to part-time), based on SED definitions, for the **entire** program

1) State proposed format(s) and consider the consequences for financial aid

2) Describe availability of courses and any change in faculty, resources, or support services.

A change in the total number of credits in a certificate or advanced certificate program

Any change to a registered licensure-qualifying program, or the addition of licensure qualification to an existing program. **Exception:** Small changes in the required number of credits in a licensure-qualifying program that do not involve a course or courses that satisfy one of the required content areas in the profession.

Section 3. Program Schedule and Curriculum

- a) For **undergraduate programs**, complete the *SUNY Undergraduate Program Schedule* to show the sequencing and scheduling of courses in the program. If the program has separate tracks or concentrations, complete a **Program Schedule** for each one.

NOTES: The *Undergraduate Schedule* must show **all curricular requirements** and demonstrate that the program conforms to SUNY's and SED's policies.

- It must show how a student can complete all program requirements within [SUNY credit limits](#), unless a longer period is selected as a format in Item 2.1(c): two years of full-time study (or the equivalent) and 64 credits for an associate degree, or four years of full-time study (or the equivalent) and 126 credits for a bachelor's degree. Bachelor's degree programs should have at least 45 credits of [upper division study](#), with 24 in the major.
- It must show how students in A.A., A.S. and bachelor's programs can complete, within the first two years of full-time study (or 60 credits), no fewer than 30 credits in [approved SUNY GER courses](#) in the categories of Basic Communication and Mathematics, and in at least 5 of the following 8 categories: Natural Science, Social Science, American History, Western Civilization, Other World Civilizations, Humanities, the Arts and Foreign Languages
- It must show how students can complete [Liberal Arts and Sciences \(LAS\) credits](#) appropriate for the degree.
- When a SUNY Transfer Path applies to the program, it must show how students can complete the number of SUNY Transfer Path courses shown in the [Transfer Path Requirement Summary](#) within the first two years of full-time study (or 60 credits), consistent with SUNY's [Student Seamless Transfer policy](#) and [MTP 2013-03](#).
- Requests for a program-level waiver of SUNY credit limits, SUNY GER and/or a SUNY Transfer Path require the campus to submit a [Waiver Request](#) –with compelling justification(s).

EXAMPLE FOR ONE TERM: Undergraduate Program Schedule

Term 2: Fall 20xx	Credits per classification						New	Prerequisite(s)
	Cr	GER	LAS	Maj	TPath			
ACC 101 Principles of Accounting	4			4	4			
MAT 111 College Mathematics	3	M	3	3			MAT 110	
CMP 101 Introduction to Computers	3							
HUM 110 Speech	3	BC	3			X		
ENG 113 English 102	3	BC	3					
Term credit total:	16	6	9	7	4			

- b) For **graduate programs**, complete the *SUNY Graduate Program Schedule*. If the program has separate tracks or concentrations, complete a **Program Schedule** for each one.

NOTE: The *Graduate Schedule* must include all curriculum requirements and demonstrate that expectations from [Part 52.2\(c\)\(8\) through \(10\) of the Regulations of the Commissioner of Education](#) are met.

SUNY Undergraduate Program Schedule (*OPTION: You can paste an Excel version of this schedule AFTER this line, and delete the rest of this page.*)

Program/Track Title and Award: BS in Physics

a) Indicate **academic calendar type**: [X] Semester [] Quarter [] Trimester [] Other (describe):

b) **Label each term in sequence**, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2)

c) **Name of SUNY Transfer Path**, if one exists: **PHYSICS** See [Transfer Path Requirement Summary](#) for details

d) Use the table to show **how a typical student may progress through the program**; copy/expand the table as needed. **Complete all columns that apply to a course.**

Term 1: Fall 1								Term 2: Spring 1							
See KEY.								See KEY.							
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Co/Prerequisites	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Co/Prerequisites
APHY 140 – Physics I: Mechanics OR APHY 142 – Advanced Physics I: Mechanics OR TPHY 131 – Honors Physics I: Mechanics	3	NS	3	3	X		AMAT 111/112/118	APHY 150– Physics II: Electromagnetism OR TPHY 151 – Honors Physics II: Electromagnetism OR APHY 152 – Physics II: Advanced Electromagnetism	3	NS	3	3	X		APHY 140/141/142, AMAT 113/119
APHY 106 – General Physics Lab I OR APHY 145 Physics Lab I	1		1	1	X		APHY 140/141/142	APHY 109 – General Physics II Lab OR APHY 155 – Physics Lab II	1		1	1	X		APHY 150/151/152
AMAT 112 – Calculus I OR TMAT 118 – Honors Calculus I	4	M	4	4	X			MAT 113 – Calculus II OR TMAT 119 – Honors Calculus II	4	M	4	4	X		
ACHM 120 – General Chem. I OR ACHM 130 – Advanced Chemistry I	3	NS	3	3	X			ACHM 121 – General Chemistry II OR ACHM 131 – Advanced Chemistry II	3	NS	3	3	X		ACHM 120/130
ACHM 124 – General Chem. I Lab	1		1	1	X		ACHM 120/130	ACHM 125 – Gen Chem. II Lab	1		1	1	X		ACHM 120/130 & ACHM 124
Foreign Language Gen Ed	3	FL	3					Writing & Critical Inq. Gen Ed	3	BC	3				
Term credit totals:	15	13	15	12				Term credit totals:	15	13	15	12			
Term 3: Fall 2								Term 4: Spring 2							
See KEY.								See KEY.							
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Co/Prerequisites	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Co/Prerequisites
APHY 240 – Structure Matter – Phys. III	3		3	3	X		AMAT 214, PHY 150/151/152	APHY 250 – Waves – Phys. IV	3		3	3	X		APHY 235 & 240 or Instructor
APHY 235 – Math. Meth. In Physics	3		3	3	X		As above	APHY 245 – Physics III Lab	1		1	1	X		APHY 240
AMAT 214 – Calculus III	4		4	4	X		AMAT 113/119	American History Gen Ed	3	AH	3				
International Perspectives Gen Ed	3	OW	3					Humanities Gen Ed	3	H	3				
Arts Gen Ed	3	AR	3					Local Gen Ed: Challenges in the 21 st Century	3		3				
								Social Sciences Gen Ed	3	SS	3				
Term credit totals:	16	6	16	10				Term credit totals:	16	9	16	4			
Term 5: Fall 3								Term 6: Spring 3							
See KEY.								See KEY.							
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Co/Prerequisites	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Co/Prerequisites
APHY 320 – Classical Mechanics	3		3	3			PHY235&240 w/C min., PHY 250	APHY 460 – Themo. & Stat. Physics	3		3	3			APHY 235&250 w/ C min., APHY 440
APHY 440 – Quantum Mechanics I	3		3	3			As above	AFPHY 450 – Quantum Mech. II	3		3	3			As above
AMAT 220 Linear Algebra OR AMAT 314 Analysis for Applications I OR AMAT 376 Discrete Probability OR	3		3	3				PHY 335Z – Advanced Lab.	3		3	3			APHY 235&250 w/ C min.

SUNY Graduate Program Schedule OPTION: *You can insert an Excel version of this schedule AFTER this line, and delete the rest of this page.)*

Program/Track Title and Award:

- a) Indicate **academic calendar** type: [] Semester [] Quarter [] Trimester [] Other (describe):
- b) **Label each term in sequence**, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2)
- c) Use the table to show **how a typical student may progress through the program**; copy/expand the table as needed.
- d) Complete the last row to show program totals and comprehensive, culminating elements. **Complete all columns that apply to a course.**

Term 1:				Term 2:			
Course Number & Title	Credits	New	Co/Prerequisites	Course Number & Title	Credits	New	Co/Prerequisites
Term credit total:				Term credit total:			
Term 3:				Term 4:			
Course Number & Title	Credits	New	Co/Prerequisites	Course Number & Title	Credits	New	Co/Prerequisites
Term credit total:				Term credit total:			
Term 5:				Term 6:			
Course Number & Title	Credits	New	Co/Prerequisites	Course Number & Title	Credits	New	Co/Prerequisites
Term credit total:				Term credit total:			
Term 7:				Term 8:			
Course Number & Title	Credits	New	Co/Prerequisites	Course Number & Title	Credits	New	Co/Prerequisites
Term credit total:				Term credit total:			
Program Total:		Total Credits:	Identify the required comprehensive, culminating element(s), such as a thesis or examination, including course number(s), if applicable:				

New: X if new course **Prerequisite(s):** list prerequisite(s) for the listed courses

Section 4. SUNY Faculty Table

- a) If applicable, provide information on faculty members who will be teaching new or significantly revised courses in the program. Expand the table as needed.
- b) **Append** at the end of this document position descriptions or announcements for each to-be-hired faculty member

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title and/or Rank at the Institution (Include and identify Program Director.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications and licenses and professional experience in field.
PART 1. Full-Time Faculty					
Ariel Caticha, Professor	100	APHY 150 Physics II: Electromagnetism, APHY 440 Quantum Physics I, APHY 450 Quantum Physics II	Ph.D., California Institute of Technology	Physics	
Keith Earle, Associate Professor, Department of Physics Chair	100	APHY 145 Physics Lab I, APHY 155 Physics Lab II, APHY 340 Electromagnetism I: Statics, APHY 350 Electromagnetism II: Electrodynamics, APHY 451 Y Bayesian Data Analysis and Signal Processing	Ph.D., Cornell University	Physics	
Jesse Ernst, Associate Professor	100	APHY 150 Physics II: Electromagnetism, APHY 235 Mathematics in Physics, APHY 320 Classical Mechanics, APHY 340 Electromagnetism I: Statics, APHY 350 Electromagnetism II: Electrodynamics	Ph.D., University Rochester	Physics	

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title and/or Rank at the Institution (Include and identify Program Director.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications and licenses and professional experience in field.
Herbert Fotso, Assistant Professor	100	APHY 440 Quantum Physics I, APHY 450 Quantum Physics II , APHY 460 – Thermodynamics and Statistical Physics, APHY 477Y Computational Methods	Ph.D., Louisiana State University	Physics	
Philip Goyal, Associate Professor	100	APHY 449Y Introduction to Quantum Foundations and Quantum Information, APHY 459Y Symmetry in Physics	Ph.D., Trinity College, UK	Physics	
Vivek Jain, Associate. Professor	100	TPHY 141 Honors Physics I: Mechanics, TPHY 151 Honors Physics II: Electromagnetism, APHY 235 Mathematics in Physics, APHY 426Y – Introduction to Particle Physics	Ph.D., University Hawaii	Physics	
Alexander Khmaladze, Asst. Professor	100	APHY 140 – Physics I: Mechanics , APHY 142 Physics II: Advanced Mechanics, APHY 152 Physics II: Advanced Electromagnetism	Ph.D., University South Florida	Applied Physics	
Kevin Knuth, Associate Professor	100	APHY 451Y Bayesian Data Analysis and Signal Processing	Ph.D., University Minnesota	Physics	
T.S. Kuan, Professor	100	APHY 440 Quantum Physics I,	Ph.D., Cornell University	Physics	

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title and/or Rank at the Institution (Include and identify Program Director.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications and licenses and professional experience in field.
		APHY 450 Quantum Physics II , APHY 460 Thermodynamics and Statistical Physics, APHY 462Y Physics of Materials			
William Lanford, Professor	100	APHY 140, TPHY 141 Honors Physics I: Mechanics, TPHY 151 Honors Physics II: Electromagnetism,	Ph.D., University Rochester	Physics	
Cecilia Levy, Assistant Professor	100	TPHY 141 Honors Physics I: Mechanics, APHY 150	Ph.D., University Muenster, Germany	Physics	
Oleg Lunin, Associate Professor	100	TPHY 151 Honors Physics II: Electromagnetism, APHY 440 Quantum Physics I, APHY 450 Quantum Physics II , APHY 460 Thermodynamics and Statistical Physics, APHY 443Y Introduction to Cosmology	Ph.D., Ohio State University	Physics	
Carolyn MacDonald, Professor	100	APHY 145 Physics Lab I, APHY 155 Physics Lab II, APHY 245 Physics Lab III, APHY 448Y Medical Imaging, APHY 462Y Physics of Materials,	Ph.D., Harvard University	Physics	

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		APHY 466Y X-ray Optics, Analysis, and Imaging			
Jonathan Petrucelli, Associate Professor	100	APHY 320 Classical Mechanics, APHY 340 Electromagnetism I: Statics, APHY 350 Electromagnetism II: Electrodynamics, APHY 430Y – Optics 466Y	Ph.D., University Rochester	Physics	
Daniel Robbins, Assistant Professor	100	APHY 409Y Mathematical Models in Physics	Ph.D., University Chicago	Physics	
Anna Sharikova, Visiting Asst. Professor	100	APHY 145 Physics Lab I, APHY 155 Physics Lab II, APHY 245 Physics Lab III	Ph.D., University South Florida	Physics	
Matthew Szydakis, Assistant Professor	100	TPHY141 Honors Physics I: Mechanics, APHY 477Y Computational Methods	Ph.D., University Chicago	Physics	
Michael Phipps, Lecturer	25%	ICSI 201 Introduction to Computer Science	M.S. University at Albany	Computer Science	
Priyantha Sugathapala, Lecturer	100	ACHM 130 Advanced Chemistry I, ACHM 131 Advanced Chemistry II	Ph.D., Wayne State University	Organic Chemistry	
Steven Plotnick, Associate Professor	100	TMAT 118 – Honors Calculus I, TMAT 119 Honors Calculus II, AMAT 315 Analysis for Applications II	Ph.D., University Michigan	Mathematics	

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Faculty Member Name and Title and/or Rank at the Institution (Include and identify Program Director.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications and licenses and professional experience in field.
Alexandre Tchernev, Associate Professor	50	AMAT 220 Linear Algebra	Ph.D., Purdue University	Commutative Algebra	
Ivana Alexandrova, Associate Professor	50	AMAT 314 Analysis for Applications I	Ph.D., University California, Berkeley	Mathematics	
Carolos Rodriguez, Associate Professor	50	AMAT 367 Discrete Probability	Ph.D., Stony Brook University	Probability & Statistics	
Rongwei Yang, Professor	50	AMAT 412 Complex Variables for Applications	Ph.D., Stony Brook University	Mathematics	
Part 2. Part-Time Faculty					
Part 3. To-Be-Hired Faculty (List as TBH1, TBH2, etc., and provide expected hiring date instead of name.)					